NO.
DATE:

CONT. by formula: $y' = u\,dv + v\,du$

$y' = e^x(e^x \cos e^x) + \sin e^x (e^x)$

$y' = e^{2x} \cos e^x + e^x \sin e^x$ #

(8) $y = \frac{e^x}{x}$

let $u = e^x$ $\quad v = x$

$du = e^x$ $\quad dv = 1$

by formula: $y' = \frac{v\,du - u\,dv}{v^2}$

$y' = \frac{x(e^x) - e^x(1)}{x^2}$

$y' = \frac{e^x(x-1)}{x^2}$ ▸ e^x is factored out #

(9) $y = \tan e^{\sqrt{x}}$

$y' = \sec^2 e^{\sqrt{x}} \left[\frac{d}{dx}(e^{\sqrt{x}})\right]$

$= \sec^2 e^{\sqrt{x}} (e^{\sqrt{x}}) \left[\frac{d}{dx}(\sqrt{x})\right]$

$= \sec^2 e^{\sqrt{x}} (e^{\sqrt{x}}) (\frac{1}{2}x^{-1/2})$

$= \frac{1}{2}x^{-1/2} e^{\sqrt{x}} \sec^2 e^{\sqrt{x}}$

$y' = \frac{\sec^2 e^{\sqrt{x}}}{2\sqrt{x}}$ #

(10) $y = e^{e^x}$

$y' = e^{e^x} \left[\frac{d}{dx}(e^x)\right]$

$y' = e^{e^x}(e^x)$ #

(11) $y = \frac{e^x - e^{-x}}{e^x + e^{-x}}$

let $u = e^x - e^{-x}$ $\quad v = e^x + e^{-x}$

$du = e^x - e^{-x}(-1)$ $\quad dv = e^x + e^{-x}(-1)$

$du = e^x + e^{-x}$ $\quad dv = e^x - e^{-x}$

by formula: $y' = \frac{u\,dv - v\,du}{v^2}$

$y' = \frac{(e^x - e^{-x})(e^x - e^{-x}) - (e^x + e^{-x})(e^x + e^{-x})}{(e^x + e^{-x})^2}$

$= \frac{(e^{2x} + 2 + e^{-2x}) - (e^{2x} - 2 + e^{-2x})}{(e^x + e^{-x})^2}$

$y' = \frac{4}{(e^x + e^{-x})^2}$

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